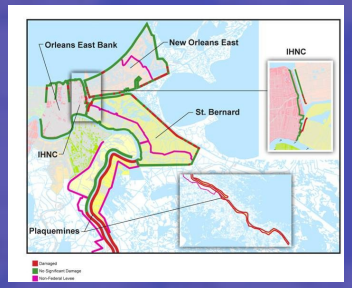
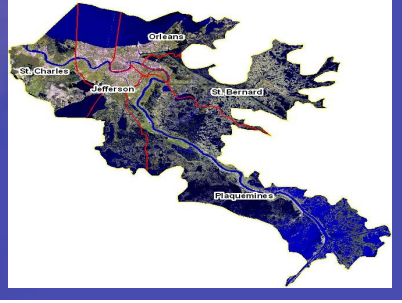




IPET – Task 1 Data Collection & Management

Denise Martin

USACE – ERDC

IPET Task 1

- Task 1 Data Collection and Management
  - **Co-leads**: Reed Mosher, Denise Martin
  - **Perishable Data Team**: Paul Mlakar, Maureen Corcoran, Bob Larson, Joe Dunbar, Noah Vroman, George Sills, Steve Maynord, David Biedenharn, others
  - **System Data Team**: Harold Smith, Tom Rodehaver, Milton Richardson, Blaise Grden, David Stuart, Dan MacDonald, Tim Pangburn, Rob Wallace, others

Task 1 Scope

- Assemble a comprehensive set of data and information about the conditions before and after Hurricane Katrina as well as a complete history of the hurricane protection projects' construction and maintenance. This collection of data will serve as the repository for information and analytic results developed throughout the Performance Evaluation.

Data Collection

- Performance Evaluation requires
  - Pre-Katrina conditions of the Hurricane Protection System
  - Events that occurred during Katrina
  - The effects of Katrina on the system.

- Data collected in these three areas forms the basis for the IPET performance evaluation
  - Perishable data
  - Background data
  - New data

Data Requirements

- Design Documents
- Construction and as-built records
- Profile, topographic, and section surveys
- Inspection Reports
- Field Investigations and Inspections
- Public interviews, forums or meetings
- Levee design heights
- Levee properties
- Aerial Photos, Videos
- Data and analyses by other agencies, private firms
- Time history of surge heights, wind speed/direction, waves
- Photos, videos, measurements of erosion near breaches
- Wall deflections
- Evidence of wall yielding
- Pump Station data (locations, elevations, discharge pool locations, optional discharge directions, performance, operators)
- Sheet-pile tip elevations (design, as-built, measured) for all I-walls
- Pool-to-pool heads during storm
- Any other data and observations relevant to IPET

Approach

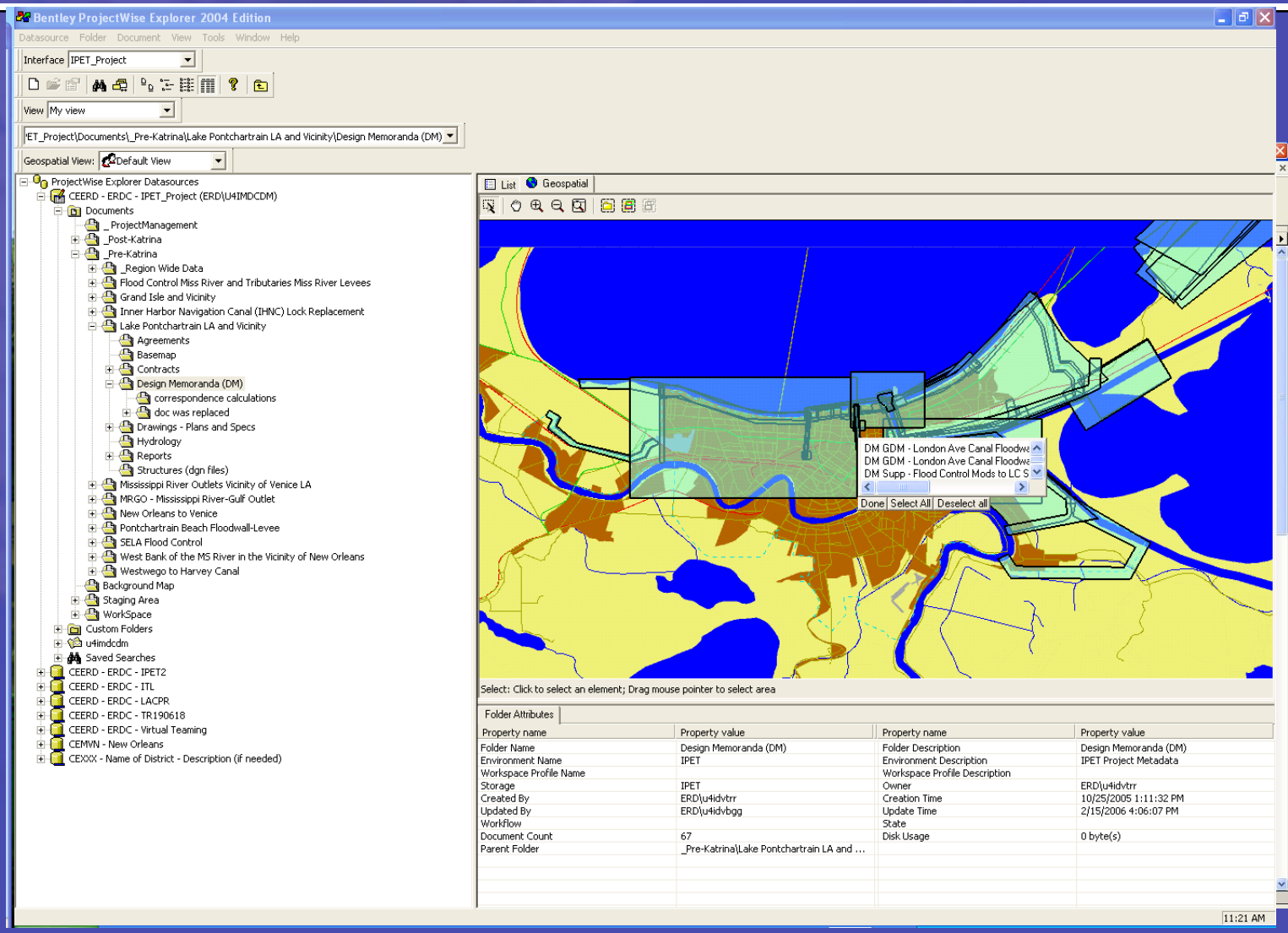
- Task 1 Data Management was performed by 3 coordinated teams:
  - Data Assembly and Coordination
    - Objective: Identify and acquire the data required to support Tasks 2-10 of this study, as well as data that must be retained for future reference.
  - Data Storage and Management
    - Objective: Define and build the hardware and software framework required to store, organize, manage, and deliver the data associated with this study.
  - Data Synthesis
    - Objective: Develop mechanisms for adapting data to meet the needs of specific applications

Primary Products

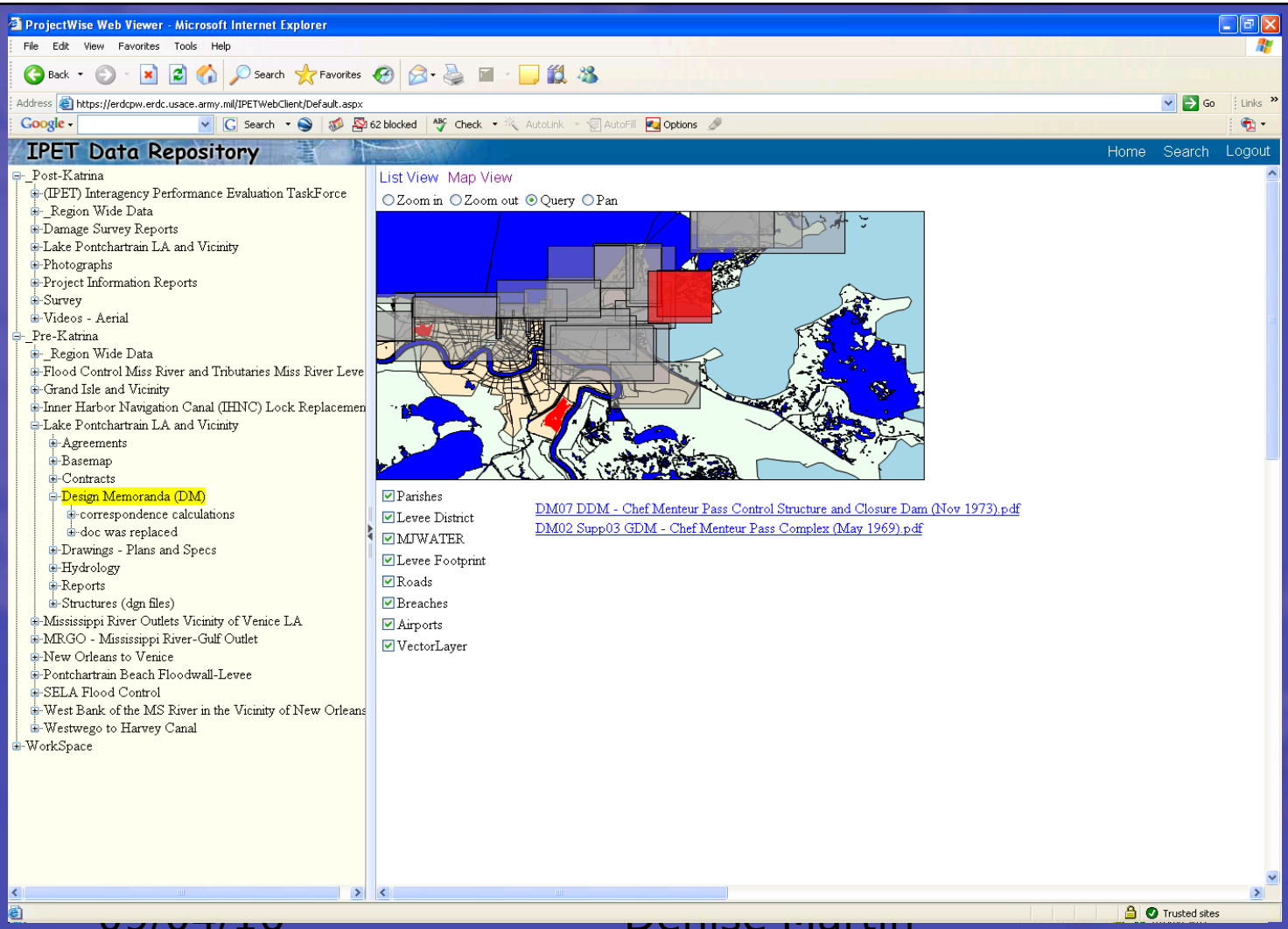
- IPET Data Repository
  - a data management system for storing, delivering, maintaining the authoritative data sets associated with this study.
  - access controlled – leverages Active Directory
  - 3 primary components:
    - GIS data – leverages the CorpsMap corporate database at USACE CPC
    - Unstructured data – Microsoft SQL Server database managed by Bentley ProjectWise
    - Large data sets – terabyte server connected to Oracle SDO database
  - Bentley ProjectWise – provides the overall metadata management for all data components

- IPET Public Website (https://ipet.wes.army.mil)
  - Opened on Nov. 2, 2005
  - Includes link to MVN Electronic Bid Solicitation website
  - Provides access to all IPET Reports and approved datasets/documents

IPET Data Repository



Web Interface to Data Repository



IPET Public Website

Access spatial data for download

links
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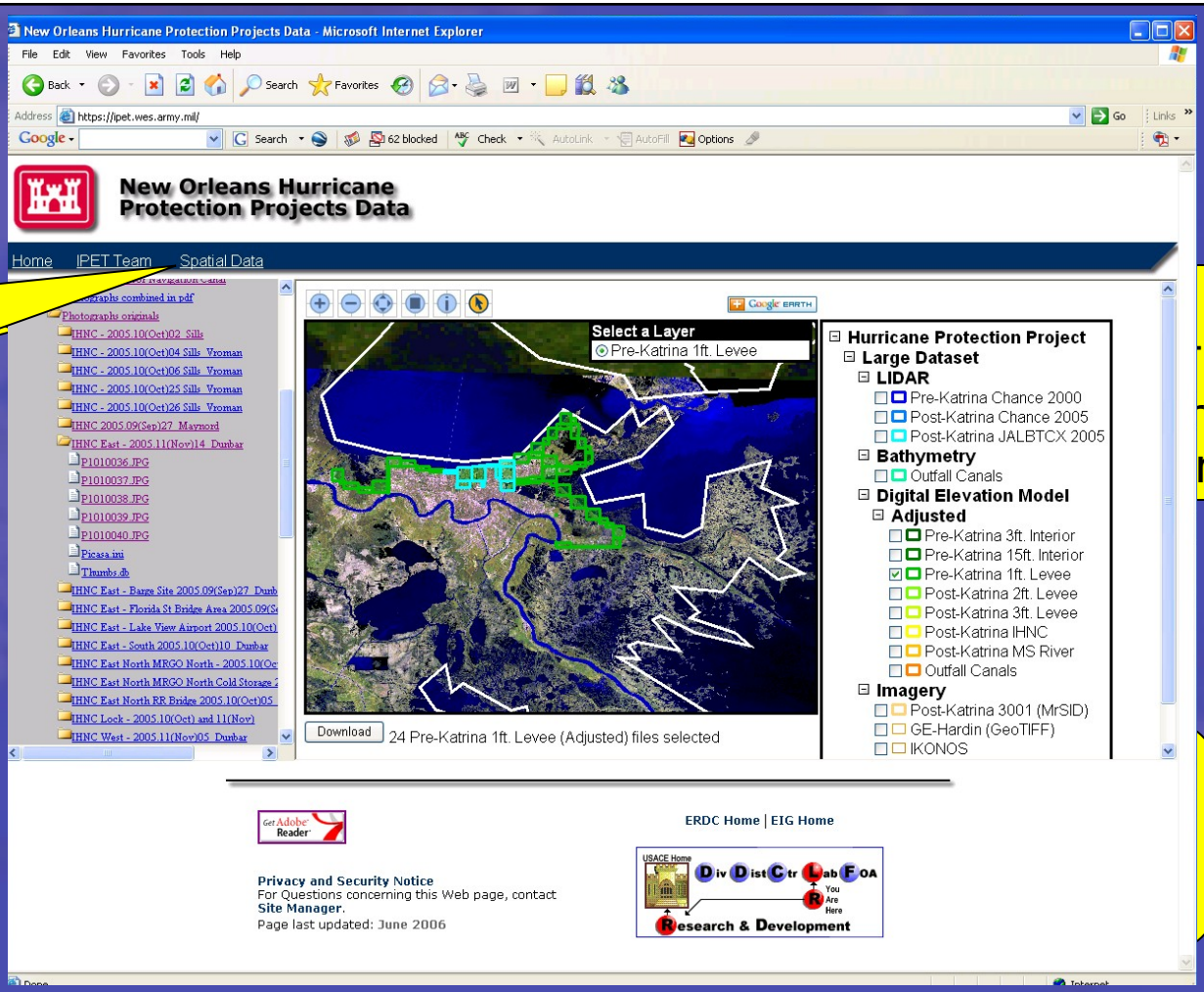
Katrina



Questions